

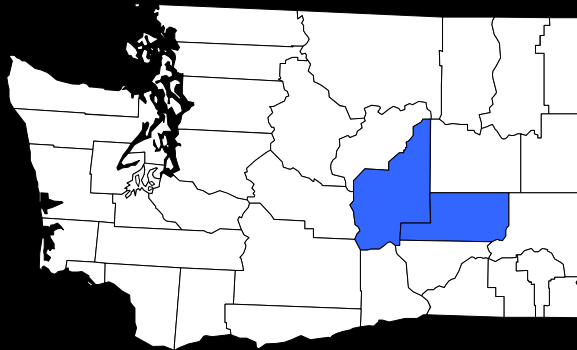
The Data Cycle

**Using Data to Learn More
About Your Community and
Make Informed Decisions**



The Data Cycle

Prepared by:
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Mary Ann's Philosophy

**Everyone has a fond spot in their heart
for numbers**

**Her baby was 6lbs. 10oz.
even though it was born
1 month premature**



**We ranked 2nd in the
state at the AA
basketball tournament**

**To understand statistics you do not have to be a
data geek. You actually use data everyday to
make sense of the world around you.**

**You got a 3.5 on your
report card, so let's go
out to dinner to celebrate**

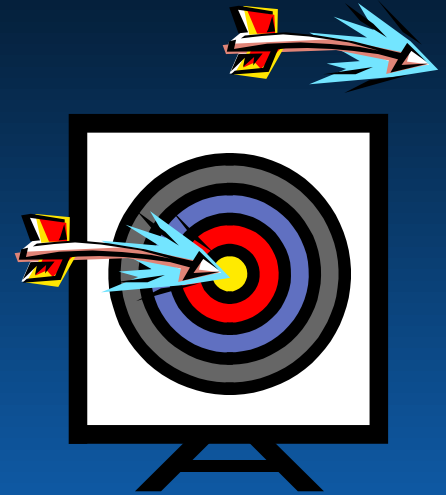


**I'm not going to buy the
Chrysler Durango it only
gets 16.2 miles per gallon**



More Philosophy

Data helps you improve your aim



The people who really need help are?

Teen fathers

Have kids between 5-9

Hispanic

Live in the south part
of the county

Service providers who
work with _____



Definitions

What is data?

Data consists of a series of facts or statements that may have been collected, stored, processed and/or manipulated but have not been organized or placed into context.

What do you use it for?

When data is organized, it becomes information. Information can be processed and used to draw generalized conclusions and, at times, make predictions.



Why Use Data

The Legislature requires it

RCW 70.190.070

The community public health and safety networks shall:

- (1) Review state and local public health data and analysis relating to risk factors, protective factors, and at-risk children and youth;**
- (2) Prioritize the risk factors and protective factors to reduce the likelihood of their children and youth being at risk. The priorities shall be based upon public health data and assessment and policy development standards provided by the department of health under RCW 43.70.555**



Why Use Data

RCW 43.70.555

The department, in consultation with the family policy council created in chapter 70.190 RCW, shall establish, by rule, standards for local health departments and networks to use in assessment, performance measurement, policy development, and assurance regarding social development to prevent health problems caused by risk factors empirically linked to: Violent criminal acts by juveniles, teen substance abuse, teen pregnancy and male parentage, teen suicide attempts, dropping out of school, child abuse or neglect, and domestic violence. The standards shall be based on the standards set forth in the public health services improvement plan as required by RCW 43.70.550.



PHIP

Public Health Improvement Plan

Began in 1994 and comes out every 2 years

**Available online from the Department of Health
www.doh.wa.gov click on Publications and
scroll down to "P" listings**

**Data (Assessment) Standards are revised and
now are part of a "best practice" for Public
Health model.**



Standards

Two standards that are most relevant to the Networks are:



Category - Understanding "Health" Issues

2.2

Information about ... threats and community health status is collected, analyzed, and disseminated at intervals appropriate for the community



Standards

Category - Understanding “Health” Issues

2.4

... policy decisions are guided by “health” assessment information, with involvement of representative community members



And Who Cares...

**So you may be thinking now.... and Who Cares
About the Law....**



Heck, I already know the answer

I don't understand it anyway

There's lies, damn lies, and statistics



Danger

If you believe these statements or anything close to them you are in danger of...

Tunnel vision

Selecting wrong issues to address in your community at this time

Setting a bad example

Missing the big picture

Missing opportunities



Why Use Data

Allows you to identify areas where “actual” issues exist

This is called assessment

Puts you in a better position to monitor issues so you know when trends change

This is called surveillance

Improves your credibility as an advocate, as someone else can look and see “facts” that support the foundation of your position



Why Use Data

Improves your ability to make thoughtful decisions

Increases chances for community buy-in and education

Increases your ability to show progress



MAO Formula

**How I, Mary Ann O'Garro see the
logical process of learning from
data for the purpose of change
and improvement**



The Formula



+



+

Go!?



? + CAR + Go



= The question or situation



What does domestic violence look like in my county?

How many children are depressed or giving up hope in my community?



Question on the Table



**Would “data” be helpful to better understand
how to answer the question...**

If yes, continue...



? + CAR + Go



=

Collect

Analyze

Reflect

Step 2



? + CAR + Go



= Collect

What data would help answer the question or describe the situation of interest?

What organization or group might have this?

How do I get it?



Collect

**Key issues come into play during the
“Collect” phase of the data cycle**

Selecting Indicators

Data Sources

Asking for Data



? + CAR + Go



= **Analyze**

Data is information that is collected in such a way that it allows us to show “current conditions”, “change” or “differences”.

Analyzing data involves working out what it means.

To improve our ability to make sense of data we use statistics.



Analyze

**Key issues come into play during the
“Analyze” phase of the data cycle**

**Basic Concepts used
with Data**

**Questions to Ask
about Data**



Principle

“Sound decision making requires the ability to collect data effectively, organize data, discover patterns, summarize trends, make inferences, draw conclusions, and make predictions”.

Electronic Learning Marketplace



? + CAR + Go



= **R**eflect

Having looked at the numbers, what do you know about them

If you showed them to someone what might they say is the “explanation” for them

What statements do you feel confident making about your community based solely on the data



? + CAR + Go

Go!?

Step 3

Decide whether or not this is the issue to take on

Start identifying strategies and goals to affect the target issue

May decide that you actual need more info

May decide that learning about the issue was enough at this point



Best Practice

Data based decision making is a best practice



An Example

2 + CAR + GO

**Applying the Formula to
Domestic Violence**



The DV Example

We have a ?

Step 1

**What does domestic violence look like
in my county? Is it any better than it
was 5 years ago?**



An Example of ? + CAR

Now what?

Collect Data



Collect Key Issues

**Selecting
Indicators**

Data Sources

Asking for Data



What's an Indicator

"Healthy Kids"



**This is the ? or issue of
interest**

Indicators define a ?, situation, or issue

**They describe what you need to see or not see
to understand the ? or issue**

Reflect your values of what's important

**They can help you "identify" what areas of data
you need to collect**



Example of Indicators

Washington Kids Count and Washington Health Foundation are indicators based publications

Risk and protective factors are an indicator framework used by DASA in the substance abuse data books

Many ?'s Networks have may require you to define your own indicators



DV Indicators

Step 2

What does domestic violence look like in my county? Is it any better than it was 5 years ago?

Domestic violence indicator options...

DV arrests - DSHS/DASA - Online or print

**Protection orders filled and granted -
Administrator of the Courts - Online or print**

**DV crimes - Association of Sheriffs and Police
Chiefs - Online or print**

Hospitalizations for Assault - DOH - Online or print



Collect Key Issues

Selecting Indicators

**Data
Sources**

Asking for Data



An Example of ? + CAR

Why these pieces of data?



Because I want to collect data that:

Is gathered in a standard way

Includes the same information for other places

Includes information for several years



An Example of ? + CAR

Because:

This gives me some confidence that it meant the same thing to all people collecting it

I can use it to compare my county to the state, another county, and possibly another place

I can look to see if there are any patterns over time

See Domestic Violence Fact Sheet



An Example of ? + CAR

So this data would be:

From an “official” source

Government

**Department of Social & Health Services
Office of Financial Management
Department of Health**

**System / Research /
Legislature**

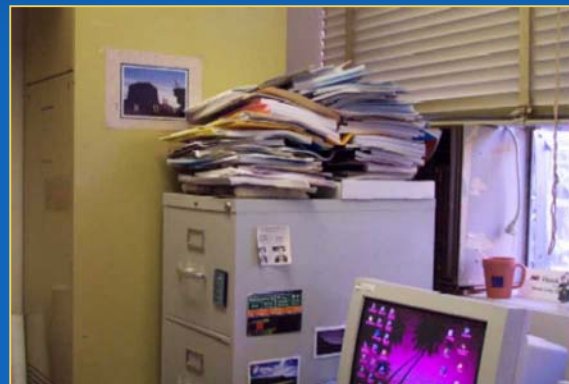
**University of Washington
Washington Health Foundation
Washington Traffic Safety Commission**



Official Data



**See Data Sources
Handout**



An Example of ? + CAR

Later you may also want:

To collect data from local surveys

**5 Year Community Action Survey
Healthy Youth**



**Really important that it comes from a reliable
source with good methods**

**It's good to know who they surveyed and how
they surveyed them**



An Example of ? + CAR

May also want:



Information from agency service records

Number of children in migrant education

Number of children enrolled in Head Start

This type of data can improve your understanding of the community context in which issues occur

Be careful putting too much emphasis on it as eligibility and program staff/agency policies can have an incredible effect on the numbers



An Example of ? + CAR

Now what?

Analyze Data



The Opinion Problem

The answer is not always what you expect

Opinion can be shaped by real life experiences but it can also be based upon inaccurate information and stereotypes

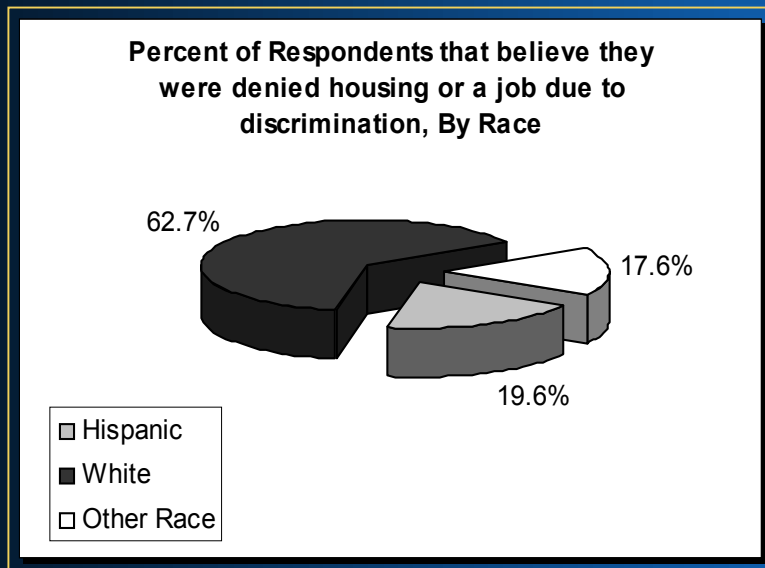
The best place for people to apply their life experiences and perspective is after some basic “facts” have been established - this can help put what is occurring in a better perspective



Data Surprises

Who is more likely to feel they were discriminated against?

Someone who describes themselves as Hispanic or White?



Almost 2 out of 3 were white

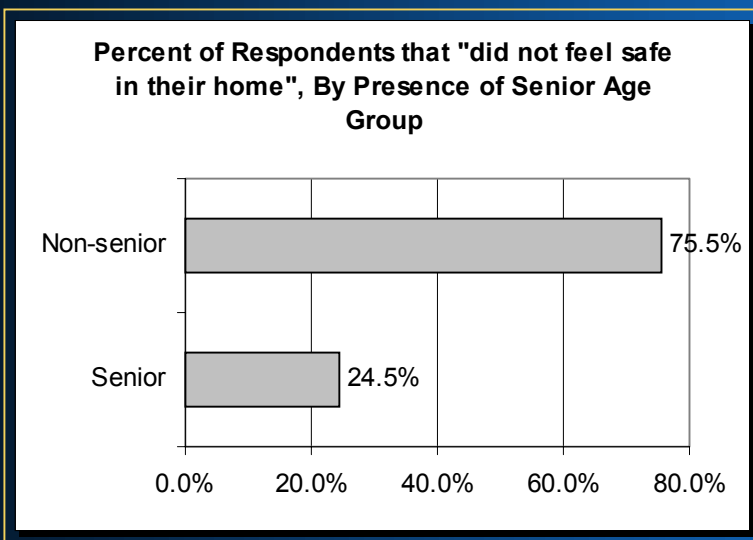
Source: Grant County Community Needs Assessment 2001



Data Surprises

Who is more likely to say that they do not feel safe in their home?

Someone who is age 65+ or under 65 years old?



3 out of 4 people were under 65

Source: Grant County Community Needs Assessment 2001



Basic Concepts

**Statistics are used to make sense of numbers,
that is analyze them**

Most commonly used statistics are:

Cases or counts

% - Percent

Rank

Average or mean

Rate

% Change



Basic Concepts

Cases or counts

The number of people an event happened to

Examples

**Number of arrests, pregnancies,
children passing WASL**

Importance

**Key piece of information used in a percent or
rate**

Tells you if you're working with "small numbers"



Basic Concepts

Rank

Where a population/issue is placed when compared to others

Examples

Rank 2nd for rate of teen pregnancies, 10th for percent of children passing WASL

High



Low

Importance

Usually based on a rate or percent

Can help you see how you're doing in relation to other places in the state and other people



Basic Concepts

Rate

The number of people an event happened to
Divided by the total number of people
in the population

X

Standard
1,000
100,000

Examples

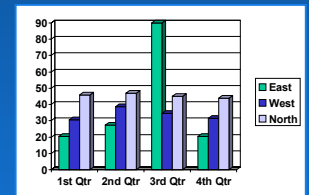
Hospitalization rate for assaults,
domestic violence arrest rate

Importance

Allows you to compare one group to
another

Shows trends

Can alleviate the effects of population age structure



Basic Concepts

Percent - %

The number of times something occurs out of 100 "per cent"

Examples

% of low birth weight babies, %
below poverty



Importance

Gives you a proportion to compare others
populations to

Can be used in ranking



Basic Concepts

Average or mean

The total of all events divided by number of events

Examples

Average number of children, average unemployment rate

Importance

Gives you a feel for where the middle is



Basic Concepts

Percent (%) Change

The difference between two points in time

Examples

Population growth

Importance

Gives you a feel for the trend in a set of numbers



Questions to Ask

Looking for patterns and trends

Questions anyone can ask about statistics:

How many people are we talking about?

How many people could we be talking about?

Do we have a percent, rank or rate?



Questions to Ask

Do we have data for more than one year?

What happens when we compare “our” percent, rank or rate to...?

The state

Another county or city

A different age group

A different race/ethnicity



Questions to Ask

Are we higher, lower, or stable?

Is this good news or bad news?

Do we know if this was worse or better a few years ago?



Analyze DV Data

What does domestic violence look like in my county? Is it any better than it was 5 years ago?

Analyze Domestic violence data...

DV arrests - What do you see?

Protection orders filled and granted -

What do you see?

DV crimes - What do you see?



Common Complaints

It's old

It comes from locals - sometimes they're pretty slow

How long can reports from contractors take to get to you?

They error check it for the whole state before they release it

Then they have to put it into some readable format that makes sense to the public



Common Complaints

There's not enough detail

Confidentiality

If there's less than 5 you might be able to figure out who it is in your community

The authority/laws that govern how they collect the data doesn't allow them to ask more than the already do

Remember the Census 2000 uproar?

If they have more detail they'll often give it to you if you special request it



An Example of ? + CAR

Now what?

Reflect on it



Reflect on DV Data

What does domestic violence look like in my county? Is it any better than it was 5 years ago?

Talk about the meaning and possible explanations...

Looking Back

**Have we been paying more or less
“attention” to this?**

Ex. Meth

Media

Big Events

Education campaigns



Reflect on DV Data

Looking Back

Have we been “doing” more or less about this?

Loss of services

Ex. Suicide

New program

New task force

Did something change in the community that would affect this?

New law

New agency director

New judge



Go!? DV Data

What does domestic violence look like in my county? Is it any better than it was 5 years ago?

Talk about whether action should be taken...

Step 3

Looking Ahead

Should this issue be addressed?

Are we the ones who should do this?

Can we help someone else do this?

Is this really where we want to spend our time and money?



Decide to Go!

If you decide to Go! then:

You're done with "this" data cycle

It's time for you to make your plan of attack

Contractors

Target Populations

Pilot testing services

**Looking at best
practices**

Evaluation



No Go!

If you decide NOT to Go! then:

You're done with the data cycle

You made a solid thoughtful justifiable decision

If it was because you still didn't have enough data and information to make a decision then that is a conclusion worth noting



DV Conclusion

What happened to DV Go!?

Service system change

Task force creation

Key agency buy in

Community solution identified

Information/access expansion

Off the Network table

Our data made a difference the next year



Network X

Practicing the Cycle's Formula

Scenario A

How many children are depressed or giving up hope in my community?

Scenario B

What is the quality of life for children being born now in my community?

See Handouts and Data Books



Scenario A

How many children are depressed or giving up hope in my community?

Collect Some possible “indicators” and pieces of data that would help us describe the questions using numbers

A list of risk and protective factors is available in the Health of Washington book

Analyze The statistic related questions about the data from the indicators

Reflect Think about what the data is showing you. Think back about anything that may explain it



Disclaimer

We know data is not perfect

Neither is our personal opinion



**The purpose of data is not to “make” the decision,
but to “guide” the decision**

**Data helps you aim your limited resources at the
best issues and most receptive/needy populations**

**Opinion and personal experience help you put
the data in context**



Data is a Best Practice

Annually review key “packaged” annual reports that include data you have an interest in

Examples

Caseloads of the Courts

Kids Count

Crime in Washington

**Washington State Pregnancy and Induced
Abortion Statistics**

Every other year -DASA and Washington State Databook



Data is a Best Practice

Every other meeting go over data from one of the problem behaviors until you have reviewed them all

Education for February! And Pregnancy for April!

Pick 10 “indicators” and review them annually

Use them to make your own community report card

Do a Data Forum at the start of each biennium with your community



Data is a Best Practice

Review your demographics and economics annually

Example

**Annual Demographic Information by
Service Delivery Area**

Population Trends



Identify TA options

The local health reality

Contract for it

Partner for it

Got a board member that likes numbers?

Community/Board Committee



Data Skills

Knowledge of Washington State data resources

Or good at researching and
community navigating

The PI's job

Knowledge of basic statistics

They know what a mean, rate,
percent is and the math that helps
you get them

The
accountant
or marketer

Knowledge of charting and making tables

Can be done in Word and Excel
and can be taught fairly easily

Not afraid of
computers! good at
scrapbooking



Most Important Skills

Able to ask questions

Able to be open minded



Remember

CAR-GO



Different Numbers

Numbers and Rates from the same source can be different but still accurate

Use different data sources

Different definitions

Different populations

Different statistical calculations



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